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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/714,118	11/14/2003	David D. Szarka	HES 2003-IP-010133U1	1948
29920	7590	11/08/2005	EXAMINER	
JOHN W. WUSTENBERG P.O. BOX 1431 DUNCAN, OK 73536			BATES, ZAKIYA W	
			ART UNIT	PAPER NUMBER
			3676	
DATE MAILED: 11/08/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/714,118

Applicant(s)

SZARKA, DAVID D.

Examiner

Zakiya W. Bates

Art Unit

3676

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-120 is/are pending in the application.
- 4a) Of the above claim(s) 34-71 and 116-120 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-33 and 72-115 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11142003.04182005.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-33 and 72-115, drawn to a method and plug for separating fluids, classified in class 166, subclass 265.
 - II. Claims 34-61, drawn to a method of cementing, classified in class 166, subclass 291.
 - III. Claims 62-71 and 116-120, drawn to a method of activating a device, classified in class 166, subclass 386.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I, II, and III are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention I has separate utility such as using a plug to separate fluids. Invention II has separate utility such as using a plug to cement a casing in a well. Invention III has separate utility such as using a plug in activating a device. See MPEP § 806.05(d).
3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.
4. Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II or III. The search for Group II is

not required for Groups I or III. The search for Group III is not required for Groups I or II, restriction for examination purposes as indicated is proper.

5. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

6. During a telephone conversation with John Wustenberg on 11/3/05 a provisional election was made without traverse to prosecute the invention of Group I, claims 1-33 and 72-115. Affirmation of this election must be made by applicant in replying to this Office action. Claims 34-71 and 116-120 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Specification

7. The abstract of the disclosure is objected to because the term "the present invention" is stated in lines 1-3 (2 occurrences). Correction is required. See MPEP § 608.01(b).

8. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The

Art Unit: 3676

disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Claim Objections

9. Claim 25 is objected to because of the following informalities: the term "the baffle adapter" lacks antecedent basis. Appropriate correction is required.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

11. Claims 1-18, 24, 27, 30, 31, 72-86, 90-96, and 99-115 are rejected under 35 U.S.C. 102(b) as being anticipated by EP 0869257 (cited by applicant).

EP 0869257 discloses a method that includes, with respect to claim 1, a method of separating fluids successively introduced into a passage comprising the step of introducing a plug at an interface of the successively introduced fluids, wherein the plug comprises an outer body and a detachable inner mandrel attached to the outer body. With respect to the depending claims, the reference teaches the limitations as claimed, including a frangible device and applying differential pressure. With respect to claim 5,

the reference discloses a method that includes a method of separating fluids successively introduced into a subterranean well bore, comprising the steps of: introducing a first fluid into the well bore through a casing string; introducing a second fluid into the well bore behind the first fluid such that an interface between the two fluids is formed; suspending an assembly comprising a plurality of plugs within the casing string, wherein at least one of the plugs comprises an outer body and a detachable inner mandrel attached to the outer body; and deploying the at least one plug within the casing string at the interface of the first and second fluids. With respect to the depending claims, the reference teaches the limitations as claimed, including a free fall releasing device (dart), profile, latch-down mechanism, frangible device, differential pressure, and float valve. See the entire document, especially Figs. 1-4 and cols. 4-12. With respect to claims 72 and 101, the reference discloses a plug system for separating fluids successively introduced into a passage comprising; an assembly comprising a plurality of plugs, wherein at least one plug comprises an outer body and a detachable inner mandrel attached to the outer body; and wherein the plurality of plugs are releasably attached to each other. With respect to the depending claims, the reference teaches the limitations as claimed, including a profile, latch-down mechanism, frangible device, and wiper fins. See the entire document, especially Figs. 1-4 and cols. 4-12.

12. Claims 1-12, 14-18, 24, 27, 30, 31, 72-86, 90-93, and 99-115 are rejected under 35 U.S.C. 102(b) as being anticipated by US 4,364,432.

US 4,364,432 discloses a method that includes, with respect to claim 1, a method of separating fluids (cement and displacement fluids) successively introduced

Art Unit: 3676

into a passage comprising the step of introducing a plug 40 at an interface of the successively introduced fluids, wherein the plug comprises an outer body and a detachable inner mandrel 14 attached to the outer body. With respect to the depending claims, the reference teaches the limitations as claimed, including a frangible device 90 and applying differential pressure. With respect to claim 5, the reference discloses a method that includes a method of separating fluids successively introduced into a subterranean well bore, comprising the steps of: introducing a first fluid (cement) into the well bore through a casing string; introducing a second fluid (displacement fluid) into the well bore behind the first fluid such that an interface between the two fluids is formed; suspending an assembly comprising a plurality of plugs 40 within the casing string, wherein at least one of the plugs comprises an outer body and a detachable inner mandrel 14 attached to the outer body; and deploying the at least one plug within the casing string at the interface of the first and second fluids. With respect to the depending claims, the reference teaches the limitations as claimed, including a free fall releasing device (dart 50), profile 26, latch-down mechanism 54, frangible device 90, differential pressure, and float valve 30. See the entire document, especially Figs. 1-5. With respect to claims 72 and 101, the reference discloses a plug system for separating fluids successively introduced into a passage comprising; an assembly comprising a plurality of plugs 40, wherein at least one plug comprises an outer body and a detachable inner mandrel 14 attached to the outer body; and wherein the plurality of plugs are releasably attached to each other. With respect to the depending claims, the

reference teaches the limitations as claimed, including a profile, latch-down mechanism, frangible device, and wiper fins. See the entire document, especially Figs. 1-5.

13. Claims 1-10, 12, 14, 16-18, 24, 27, 31, 72-83, 85, 86, 90, 91, 93, 99, 101-112, and 114 are rejected under 35 U.S.C. 102(e) as being anticipated by US 6,799,638

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

US 6,799,638 discloses a method that includes, with respect to claim 1, a method of separating fluids (cement and drilling fluids) successively introduced into a passage comprising the step of introducing a plug 10 at an interface of the successively introduced fluids, wherein the plug comprises an outer body and a detachable inner mandrel 17 attached to the outer body. With respect to the depending claims, the reference teaches the limitations as claimed, including a frangible device 30 and applying differential pressure. With respect to claim 5, the reference discloses a method that includes a method of separating fluids successively introduced into a subterranean well bore, comprising the steps of: introducing a first fluid (cement) into the well bore through a casing string; introducing a second fluid (drilling fluid) into the well bore behind the first fluid such that an interface between the two fluids is formed; suspending an assembly comprising a plurality of plugs 11, 12 within the casing string,

wherein at least one of the plugs comprises an outer body and a detachable inner mandrel 17 attached to the outer body; and deploying the at least one plug within the casing string at the interface of the first and second fluids. With respect to the depending claims, the reference teaches the limitations as claimed, including a free fall releasing device (ball or dart), latch-down mechanism, frangible device 30, differential pressure, and float valve (not shown, at bottom of 15). With respect to claims 72 and 101, the reference discloses a plug system for separating fluids successively introduced into a passage comprising; an assembly comprising a plurality of plugs 11, 12, wherein at least one plug comprises an outer body and a detachable inner mandrel 17 attached to the outer body; and wherein the plurality of plugs are releasably attached to each other. With respect to the depending claims, the reference teaches the limitations as claimed, including a latch-down mechanism, frangible device, and wiper fins. See the entire document, especially Figs. 1-5.

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. Claims 19-23, 25, 26, 28, 29, 32, 33, 87-89, 97, and 98 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 0869257 in view of US 6,571,869.

EP 0869257 discloses a method and apparatus as disclosed above. However, the reference fails to teach a baffle adapter as called for in the claims.

US 6,571,869 teaches a method and apparatus having downhole plugs that includes a baffle adapter 125 for the purpose of placing a baffle collar above the cementing tool prevents the cement in the annulus from back flowing into the pipe.

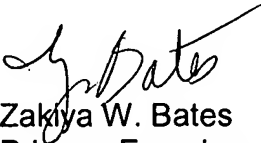
It would have been considered obvious to one of ordinary skill in the art at the time the invention was made to have provided the apparatus of EP 0869257 with a baffle adapter in view of US 6,571,869 in order to permit plug systems to support high pressures.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zakiya W. Bates (formerly Zakiya Walker) whose telephone number is (571) 272-7039. The examiner can normally be reached on Monday-Friday, 8:30 AM-5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Glessner can be reached on (571) 272-6843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Zakiya W. Bates
Primary Examiner
Art Unit 3676

zb
November 3, 2005